

Content Standards Informer

Curriculum and Instruction Unit

January 2010



Montana
Office of Public Instruction
Denise Juneau, State Superintendent

opi.mt.gov

In This Issue

Mathematics Top Ten for 2009

The OPI Curriculum and Instruction Unit together with Montana Educators:

1. revised the Mathematics Content Standards and Performance Descriptors.
2. recommended and received approval of Board of Public Education for of the revised mathematics standards/benchmarks and performance descriptors. Find the document at <http://www.opi.mt.gov/Accred/cstandards.html> and on the Mathematics web page <http://www.opi.mt.gov/Math/index.html>. I hope you take a look at all the other resources on each of these pages.
3. examined and responded to the College and Career Ready Standards from the Common Core State Standards Initiative. Information and response is located on the OPI Web site <http://opi.mt.gov/CCSSO/index.html>.
4. began developing the Essential Learning Expectation for each grade level based on the 2009 mathematic standards and benchmarks by a group of K-12 mathematics teachers from across the state.
5. held the first *State of Montana Mathematics Education Forum*. The presentations, materials, and summaries are located at <http://mt-math-forum.wikispaces.com/> please join in or start a discussion.
6. examined and responded to the K-12 Common Core Standards from the Common Core State Standards Initiative. Information and response is located on the OPI Web site <http://opi.mt.gov/CCSSO/index.html>.
7. continued work on the Essential Learning Expectations (ELE) to make certain the ELE represent an appropriate learning progression toward the benchmarks as well as a realistic amount of learning for each grade level.
8. attended the National Science, Technology, Engineering, and Mathematics (STEM) meeting.
9. began an alignment process to compare the 2009 standards and benchmarks to the 1998 standards, ACT, SAT, Achieve American Diploma Project and summary.
10. worked collaboratively with the Montana Council of Teachers of Mathematics, Indian Education for All specialists, Montana Math and Science Teacher Initiative, Montana Learning Center, and others.

Happy New Year! I wish you the best personally and professionally in 2010!

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Meeting the Needs of Talented Readers

The School-wide Enrichment Model-Reading (SEM-R), developed by Sally Reis, Ph.D., was developed to increase reading challenges and enjoyment in all students with a focus on talented readers. Here are some of her findings:

Characteristics of Talented Readers

- reading earlier than their peers,
- spending more time reading,
- reading a greater variety of literature,
- reading at least two grade levels above their chronological grade placement,
- demonstrating advanced vocabulary and understanding of language,
- perceiving relationships between and among characters,
- grasping complex ideas,
- possibly not profiting from conventional instruction in reading, and
- benefiting from diagnostically based instruction to ensure improvement in skills.

Researchers agree that regular reading instruction is often too easy for talented readers; they need different reading instruction. The appropriate match between a learner's abilities and the difficulty of the work must be sought. If the match is below the child's level of understanding and knowledge, learning is less efficient and development may be halted.

Suggested Strategies

- high interest literature geared toward the students' reading levels rather than age,
- instruction geared toward the students' strengths,
- focus on higher level comprehension skills,
- use of higher level questioning and opportunities to incorporate prior knowledge'
- book discussions with intellectual peers, and
- teacher-facilitated reading conferences focused on themes and ideas rather than facts and plot summaries.

Using textbooks and basal readers that may be several years below students' reading level may create both halted development and motivational problems. The emphasis must be on finding books that challenge and help talented readers to make continuous progress.

<http://www.gifted.uconn.edu/SEMR/about/talented-readers.html>

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Join National Lab Day	Looking for help with your science fair, or with a problem-based project, or maybe someone to host a field trip, advise an after-school program, or have a scientist or engineer come speak to your students about their work? Are you a scientist, engineer, technologist, or mathematician who is interested in sharing your expertise with teachers and students? If so, visit the National Lab Day Web site at: www.nationallabday.org to sign up and submit your idea for a project and/or be matched with a request, or just to find out more about National Lab Day.
Montana State University Offers Free Lesson Plans and Alternative Energy Interactives	Science teachers can access free lesson plans and download alternative energy interactives through Montana State University's National Teachers' Enhancement Network (NTEN). Lesson plans cover all grade levels with topics in Earth science, physical science, life science and space science, including multicultural science lessons developed by Native American teachers, and lessons on rocketry and physics written by a science teacher working with NSF-EPSCoR faculty at MSU. The "Hydrogen and the Environment" Web site explains the connection between Yellowstone National Park and the quest for alternative fuels, including videos, student profiles and images, along with free downloads: an interactive map of Yellowstone microbes and an animation of how hydrogen is produced. Visit eu.montana.edu/nten and click on Professional Resources. Copyright © 2009 National Science Teachers Association . OPI Contact: Katie Burke (406) 444-3557 or kburke@mt.gov
Online Learning Tool	Have you seen the Web 2.0 tool Webspiration http://mywebspiration.com/ ? Webspiration combines the power of visual thinking and outlining to enhance thinking, learning and collaboration. Use Webspiration to map out ideas, organize with outlines, and collaborate online with teams or colleagues. Create concept maps, mind maps, idea webs and other powerful visual thinking models in Webspiration's Diagram View. Build organized outlines, plans and reports with Webspiration's Outline View. Webspiration unleashes your creativity, strengthens organizational skills, and transforms your ideas and information into knowledge.
Thinkfinity: Online Resource for Teachers, Parents, Students, and After-School Programs	A great resource for not only 55,000 standards-based K-12 lesson plans and interactives, but also professional development training is Thinkfinity: http://www.thinkfinity.org/home.aspx . Thinkfinity partners with organizations such as The National Council of Teachers of English, International Reading Association, National Center for Family Literacy, and The National Council of Teachers of Mathematics to provide a wide range of resources to enhance classroom instruction. Thinkfinity also is a great resource for students, parents and after-school programs. OPI Contact: Kris Goyins (406) 444-0729 or kgoyins@mt.gov

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Indian Education and Standards Presentation

The OPI invites you to join us January 13, 2010, 3:30-4:15, for an online presentation highlighting the integration of Indian Education into the Montana Content Standards. This is an opportunity to learn more about Indian Education for All (IEFA), integration of IEFA into the content standards, and resources to support the integration of IEFA and the standards into classroom instruction. The presentation will be hosted by the Curriculum and Instruction Unit and the Indian Education Division of the OPI. To join the presentation click on: <http://connect.opi.mt.gov/c&i1/> You must have Flash version 8 or higher installed on your computer and a set of speakers connected. If you have never attended a Connect Pro meeting before. Test your connection: http://connect.opi.mt.gov/common/help/en/support/meeting_test.htm

Standards-Based Education Presentation

Have you taken time to view the Montana Standards Based Education Presentation? It is located on the OPI Web site: <http://www.opi.mt.gov/Accred/cstandards.html>

Listserv Sign Up

The Content Standards Informer (CSI) will be distributed the first Friday of each month through the Content Standards Informer Listserv. If you would like to receive the CSI each month please sign up for the listserv at: <http://lists.opi.mt.gov/mailman/listinfo/contentstandardsinformer>

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